MSFC Safety Bulletins

Lockout/Tagout: *Close Call* Serves As Early *Warning*

What Happened?

A journeyman electrician was working on a fluorescent light fixture in Building 4203. His wire cutters touched an energized electrical conductor in the light fixture. The current jolted the insulated tool out of his hand, but did not cause an injury. In addition, co-workers observing the task did not intervene prior to the incident.

What Caused The Incident?

The electrical circuit supplying the light fixture had not been de-energized (placed in a zero energy state), locked out and tagged out, and tested to confirm the absence of energy in the circuit before work began.

What Are The Possible Root Causes?

- Attitude: 'I've done it this way for years, and never had a problem!'
- Knowledge of hazard overshadowed by belief that 'it will never happen to me'.
- Observers failed to question unsafe work practices.
- Reluctance to disrupt customers' work environment.
- Belief that 'hot' repair can be completed in less time than it takes to properly lockout and tagout the hazardous energy sources.
- Worker not carrying lockout/tagout devices or meter to job.
- Inadequate or improper labeling of electrical circuits in panel box increases time required to implement energy control procedures.
- Inadequate or ineffective training of authorized employees, per 29 CFR 1910.147 and 1910.332.
- Lack of awareness of the safe work requirements stated in 29 CFR 1910.137, 147, 331, 332, 333, 334, 335.

What *Could* Have Happened?

- Worker electrocuted.
- Worker received electrical burns.
- Worker injured by falling off of ladder.
- Damage to equipment on lighting circuit.

What Can Be Done?

- Provide OSHA-compliant lockout/tagout training of "authorized employees".
- Enhance written energy control procedure for lighting circuits; retrain.
- Conduct effective annual audit of energy control program and written procedures.
- Enhance JHA's to effectively describe potential injuries, control of hazards, and PPE.
- Define and document OSHA-compliant safe work procedures for work on and near energized electrical conductors, when necessary.

What Lessons Should We Learn?

- Worker safety is more important than convenience or schedule pressure.
- Compliance with all regulations for lockout/tagout and safe electrical work practices is essential.
- Effective SHE training protects employees from injury.
- Always take action when you see others involved in unsafe work practices.